Amendments to the Claims

This listing of the claims will replace all prior versions and listings of claims in the application.

Listing of Claims

1. (currently amended) A continuous process for the preparation of ethyl lactate (I) by esterification of lactic acid using ethanol according to the reaction (1):

$$CH_3CH(OH)CO_2H + CH_3CH_2OH = CH_3CH(OH)CO_2CH_2CH_3 + H_2O$$
 (1)
(I)

comprising reacting said lactic acid with ethanol according to an ethanol/lactic acid molar ratio at least equal to 2.5, in the presence of a catalyst selected from the group consisting of H₂SO₄, H₃PO₄, methanesulfonic acid or an acidic ion-exchange resin, at a temperature ranging from 50°C to 90°C, at atmospheric pressure; said process comprising:

- continuously extracting a mixture comprising ethyl lactate, unconverted lactic acid, ethanol, water and small amounts of heavy products, at atmospheric pressure, from the reaction medium at a degree of conversion of the lactic acid at most equal to 80%; then
- subjecting this mixture to a flash separation at a temperature of between 80°C and 90°C and under a pressure of less than or equal to 65 mbar, and
- subjecting a top stream from said flash separation, comprising ethyl lactate, ethanol and water, to a continuous fractional distillation, at atmospheric pressure, said top stream from said flash separation being introduced onto a specific plate of a distillation column; and
- continuously recycling a bottom stream, composed essentially of unconverted lactic acid and of heavy products, to the esterification reaction medium; and
- recovering a mixture of ethanol and of water as a top product from the fractional distillation: and
- recovering an ethyl lactate having a water content which makes possible its subsequent purification

as a bottom product from the fractional distillation.

- 2. (previously presented) The process as claimed in claim 1, characterized in that use is made of an ethanol/lactic acid molar ratio ranging from 2.5 to 4.5.
- 3. (previously presented) The process as claimed in claim 1, characterized in that the mixture is extracted continuously from the reaction medium when the degree of conversion of the lactic acid is between 65% and 75%.
- 4. (previously presented) The process as claimed in claim 1, characterized in that the top stream exiting from the flash separation feeds a fractional distillation column at a point situated in the bottom part of said column.
- 5. (previously presented) The process as claimed in claim 1, characterized in that the fractional distillation of the top stream resulting from the flash separation is carried out at a column bottom temperature ranging from 152°C to 165°C.
- 6. (previously presented) The ethyl lactate obtained as claimed in claim 1, characterized in that it has a water content at most equal to 0.3%.
- 7. (previously presented) The process as claimed in claim 1 characterized in that the temperature of said reaction ranges from 80°C and 90°C.
 - 8-9. (canceled)